

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A computer implemented method comprising:
 - receiving a first request to create a three-dimensional virtual reality scene;
 - receiving a second request to add at least two media objects to the virtual reality scene, wherein each media object is two-dimensional;
 - associating each media object with a series of two-dimensional views of the media object from various orientations and locations in three dimensional space;
 - preparing a translation vector and a rotation matrix for each of the media objects, the rotation matrix and the translation matrix defining an orientation and a location of each of the media objects in the virtual reality scene, wherein each two-dimensional view of each media object defines a different orientation of each media object;
 - building the virtual reality scene for display, wherein the at least two media objects are included within the virtual reality scene, and the virtual reality scene is translatable and rotatable, and wherein translating and rotating the virtual reality scene results in changing the respective two-dimensional views of the object objects to give the appearance of the media objects having three dimensional qualities.
2. (Previously presented) The computer implemented method of claim 1 further comprising:
 - receiving a third request to manipulate the virtual reality scene; and
 - manipulating the virtual reality scene.
3. (Previously presented) The computer implemented method of claim 2 further comprising:
 - updating the translation vector and rotation matrix for each of the media objects responsive to receiving the third request to manipulate the scene.

4. (Previously presented) The computer implemented method of claim 2 wherein the third request to manipulate is received from an application program.
5. (Previously presented) The computer implemented method of claim 2 wherein the third request to manipulate originates from a user.
6. (Previously presented) The computer implemented method of claim 2 wherein the third request to manipulate is one of a pan request, a zoom request, and a tilt request.
7. (Previously presented) The computer implemented method of claim 2 further comprising:
calling one or more library functions of a plurality of library functions to manipulate the media objects.
8. (Previously presented) The computer implemented method of claim 7 wherein the library functions are included in an operating system enhancement application program interface.
9. (Cancelled)
10. (Previously presented) The computer implemented method of claim 1 further comprising:
receiving a selection of a first media object of the media objects within the scene.
11. (Previously presented) The computer implemented method of claim 10 further comprising:
receiving a third request to manipulate the first media object.
12. (Previously presented) The computer implemented method of claim 11 further comprising:
updating the translation vector and rotation matrix for the first media object responsive to receiving the third request to manipulate the first media object.

13. (Previously presented) The computer implemented method of claim 11 wherein the third request to manipulate originates from a user.

14. (Previously presented) The computer implemented method of claim 11 wherein the third request to manipulate is one of a pan request, a zoom request, and a tilt request.

15. (Previously presented) The computer implemented method of claim 11 further comprising:

calling one or more library functions of a plurality of library functions to manipulate the media objects.

16. (Previously presented) The computer implemented method of claim 15 wherein the library functions are included in an operating system enhancement application program interface.

17. (Cancelled)

18. (Previously presented) The computer implemented method of claim 1 wherein each media object further comprises:

a soundtrack associated with each media object such that the soundtrack is to be played when the media object is selected by a user.

19. (Previously presented) The computer implemented method of claim 18 wherein the soundtrack is to be played responsively to movement of the associated media object.

20. (Previously presented) The computer implemented method of claim 1 further comprising: receiving a designation of a soundtrack to be played in conjunction with the displaying of the scene.

21. (Previously presented) The computer implemented method of claim 20 wherein the soundtrack is played by calling one or more library functions of a plurality of library functions.

22. (Previously presented) The computer implemented method of claim 1 wherein displaying comprises:

calling one or more library functions of a plurality of library functions to display the media objects.

23. (Currently Amended) A computer implemented method comprising:

storing a first function to allow an application program to create a three-dimensional virtual reality scene, wherein the scene is to be able to be translated and rotated;

receiving a request for execution of the first function;

storing a second function to allow the application program to add at least two media objects, wherein each media object is two-dimensional, to the virtual reality scene and to associate each media object with a series of two-dimensional views of the object from various orientations and locations in three dimensional space, responsive to the request to execute the first function, wherein each two-dimensional view of each media object defines a different orientation of each media object; and

receiving a request for execution of the second function; and

preparing a translation vector and a rotation matrix for each of the media objects, the rotation matrix and the translation matrix defining an orientation and a location of each of the media objects in the virtual reality scene responsive to the request to execute the second function, and wherein translating and rotating the virtual reality scene results in changing the respective two-dimensional views of the object objects to give the appearance of the media objects having three dimensional qualities.

24. (Previously presented) The computer implemented method of claim 23 further comprising:

storing a third function to render the virtual reality scene and the media objects in the virtual reality scene;

receiving a request for execution of the third function; and

rendering the virtual reality scene responsive to receiving the request to execute the third function.

25. (Previously presented) The computer implemented method of claim 24 further comprising:

receiving a request from a user to manipulate the virtual reality scene.

26. (Previously presented) The computer implemented method of claim 25 further comprising:

updating the translation vector and rotation matrix for each of the media objects responsive to receiving the request to manipulate the virtual reality scene.

27. (Previously presented) The computer implemented method of claim 25 wherein the request to manipulate is one of a pan request, a zoom request, and a tilt request.

28. (Previously presented) The computer implemented method of claim 25 further comprising:

calling one or more library functions of a plurality of library functions to manipulate the media objects.

29. (Previously presented) The computer implemented method of claim 28 wherein the library functions are included in an operating system enhancement application program interface.

30. (Currently Amended) A system comprising:

means for receiving a first request to create a three-dimensional virtual reality scene;

means for receiving a second request to add at least two media objects to the virtual reality scene, wherein each media object is two-dimensional;

means for associating each media object with a series of two-dimensional views of the object from various orientations and locations in three dimensional space;

means for preparing a translation vector and a rotation matrix for each of the media objects, the rotation matrix and the translation matrix defining an orientation and a location of each of the media objects in the virtual reality scene, wherein each two-dimensional view of each media object defines a different orientation of each media object; and

means for building the virtual reality scene for display, wherein the at least two media objects are included within the virtual reality scene, and the virtual reality scene is translatable and rotatable, and wherein translating and rotating the virtual reality scene results in changing the respective two-dimensional views of the object objects to give the appearance of the media objects having three-dimensional qualities.

31. (Previously presented) The system of claim 30 further comprising:
means for receiving from a user a third request to manipulate the virtual reality scene;
and
means for manipulating the virtual reality scene.
32. (Previously presented) The system of claim 31 further comprising:
means for updating the translation vector and rotation matrix for each of the media objects responsive to the means for receiving from the user the third request to manipulate the scene.
33. (Previously presented) The system of claim 31 wherein the third request to manipulate is one of a pan request, a zoom request, and a tilt request, and the system further comprises:
means for panning;
means for zooming; and
means for tilting.
34. (Original) The system of claim 31 further comprising:
means for calling one or more library functions of a plurality of library functions to manipulate the media objects.
35. (Previously presented) The system of claim 34 wherein the library functions are included in an operating system enhancement application program interface.
36. (Cancelled)

37. (Original) The system of claim 30 wherein each media object further comprises:
a soundtrack associated with each media object such that the soundtrack is to be played
when the media object is selected by a user.
38. (Previously presented) The system of claim 37 further comprising:
means for playing the soundtrack responsively to movement of the associated media
object.
39. (Original) The system of claim 30 further comprising:
means for receiving a designation of a soundtrack to be played in conjunction with the
displaying of the scene.
40. (Original) The system of claim 39 further comprising:
means for calling one or more library functions of a plurality of library functions to play
the soundtrack.
41. (Original) The system of claim 30 wherein displaying comprises:
means for calling one or more library functions of a plurality of library functions to
display the media objects.
42. (Currently Amended) A machine readable storage medium storing executable
instructions which cause a processor to perform operations comprising:
receiving a first request to create a three-dimensional virtual reality scene;
receiving a second request to add at least two media objects to the virtual reality scene,
wherein each media object is two-dimensional;
associating each media object with a series of two-dimensional views of the media object
from various orientations and locations in three dimensional space;
preparing a translation vector and a rotation matrix for each of the media objects, the
rotation matrix and the translation matrix defining an orientation and a location of each of the

media objects in the virtual reality scene, wherein each two-dimensional view of each media object defines a different orientation of each media object;

building the virtual reality scene for display, wherein the at least two media objects are included within the virtual reality scene, and the virtual reality scene is translatable and rotatable, and wherein translating and rotating the virtual reality scene results in changing the respective two-dimensional views of the ~~object~~ objects to give the appearance of the media objects having three dimensional qualities.

43. (Previously presented) The machine readable storage medium of claim 42 wherein the processor performs further operations comprising:

receiving from a user a third request to manipulate the virtual reality scene; and

manipulating the virtual reality scene, wherein manipulating is at least one of translating the virtual reality scene and rotating the virtual reality scene with respect to at least one camera view.

44. (Previously presented) The machine readable storage medium of claim 43 wherein the processor performs further operations comprising:

updating the translation vector and rotation matrix for each of the media objects responsive to receiving the third request to manipulate the scene.

45. (Previously presented) The machine readable storage medium of claim 43 wherein the third request to manipulate is one of a pan request, a zoom request, and a tilt request.

46. (Previously presented) The machine readable storage medium of claim 43 wherein the processor performs further operations comprising:

calling one or more library functions of a plurality of library functions to manipulate the media objects.

47. (Previously presented) The machine readable storage medium of claim 46 wherein the library functions are included in an operating system enhancement application program interface.

48. (Previously presented) The machine readable storage medium of claim 42 wherein each media object further comprises:

a soundtrack associated with each media object such that the soundtrack is to be played when the media object is selected by a user.

49. (Previously presented) The machine readable storage medium of claim 48 wherein the soundtrack is to be played responsively to movement of the associated media object.

50. (Previously presented) The machine readable storage medium of claim 42 wherein the processor performs further operations comprising:

receiving a designation of a soundtrack to be played in conjunction with the displaying of the scene.

51. (Previously presented) The machine readable storage medium of claim 50 wherein the soundtrack is to be played by calling one or more library functions of a plurality of library functions.

52. (Previously presented) The machine readable storage medium of claim 42 wherein the displaying comprises:

calling one or more library functions of a plurality of library functions to display the media objects.

53. (Currently Amended) A machine readable storage medium storing executable instructions which cause a processor to perform operations comprising:

storing a first function to allow an application program to create a three-dimensional virtual reality scene, wherein the scene is to be able to be translated and rotated;

receiving a request for execution of the first function;

storing a second function to allow the application program to add at least two media objects, wherein each media object is two-dimensional, to the virtual reality scene and to associate each media object with a series of two-dimensional views of the object from various

orientations and locations in three dimensional space, responsive to the request to execute the first function, wherein each two-dimensional view of each media object defines a different orientation of each media object;

receiving a request for execution of the second function; and

preparing a translation vector and a rotation matrix for each of the media objects, the rotation matrix and the translation matrix defining an orientation and a location of each of the media objects in the virtual reality scene responsive to the request to execute the second function, and wherein translating and rotating the virtual reality scene results in changing the respective two-dimensional views of the objeet objects to give the appearance of the media objects having three dimensional qualities.

54. (Previously presented) The machine readable storage medium of claim 53 wherein the processor performs further operations comprising:

providing a third function to render the virtual reality scene and the media objects in the virtual reality scene;

receiving a request for execution of the third function; and

rendering the virtual reality scene responsive to receiving the request to execute the third function.

55. (Previously presented) The machine readable storage medium of claim 54 wherein the processor performs further operations comprising:

receiving a request from a user to manipulate the scene.

56. (Previously presented) The machine readable storage medium of claim 55 wherein the processor performs further operations comprising:

updating the translation vector and rotation matrix for each of the media objects responsive to receiving the request to manipulate the scene.

57. (Previously presented) The machine readable storage medium of claim 55 wherein the request to manipulate is one of a pan request, a zoom request, and a tilt request.

58. (Previously presented) The machine readable storage medium of claim 55 wherein the processor performs further operations comprising:

calling one or more library functions of a plurality of library functions to manipulate the media objects.

59. (Previously presented) The machine readable storage medium of claim 58 wherein the library functions are included in an operating system enhancement application program interface.

60. (Cancelled)

61. (Previously presented) The machine readable storage medium of claim 53 wherein the series of views is captured by a camera rotated about a subject of the media object.

62. (Previously presented) The machine readable storage medium of claim 53 wherein the series of views is captured by a camera directed at a rotated subject of the media object.

63. (Previously presented) The machine readable storage medium of claim 53 wherein the series of views is determined algorithmically when the media object is added to the virtual reality scene.

64. (Previously presented) The machine readable storage medium of claim 55 wherein the operations further comprise, in response to a request to navigate within the virtual reality scene, replacing a displayed view of the media object in the scene with a different view in the series of views based on the translation vector and rotation matrix to reorient and relocate the object to match the navigation.

65. (Previously presented) The computer implemented method of claim 2 additionally comprising:

receiving a fourth request to build a camera view of the virtual reality scene, the camera view including the at least two media objects in the virtual reality scene; and

rendering the at least one camera view of the virtual reality scene.

66. (Previously presented) The machine readable medium of claim 43 wherein the processor performs further operations comprising:

receiving a fourth request to build a camera view of the virtual reality scene, the camera view including the at least two media objects in the virtual reality scene; and
rendering the at least one camera view of the virtual reality scene.

67. (New) A computer implemented method comprising:

receiving a first request to create a three-dimensional virtual reality scene;
receiving a second request to add at least one media object to the virtual reality scene, wherein the media object is two-dimensional;
associating the media object with a series of two-dimensional views of the media object from various orientations and locations in three dimensional space;
preparing a translation vector and a rotation matrix for the media object, the rotation matrix and the translation matrix defining an orientation and a location of the media object in the virtual reality scene, wherein each two-dimensional view of the media object defines a different orientation of the media object;
building the virtual reality scene for display, wherein the media object is included within the virtual reality scene, and the virtual reality scene is translatable and rotatable, and wherein translating and rotating the virtual reality scene results in changing the respective two-dimensional views of the media object to give the appearance of the media object having three dimensional qualities.

68. (New) The computer implemented method of claim 67 further comprising:

receiving a third request to manipulate the virtual reality scene; and updating the translation vector and rotation matrix for the media object responsive to receiving the third request to manipulate the scene.

69. (New) The computer implemented method of claim 68 wherein the third request to manipulate is one of a pan request, a zoom request, and a tilt request.

70. (New) The computer implemented method of claim 67 further comprising:
receiving a third request to manipulate the media object and updating the translation vector and rotation matrix for the media object responsive to receiving the third request to manipulate the media object.
71. (New) The computer implemented method of claim 70 wherein the third request to manipulate is one of a pan request, a zoom request, and a tilt request.
72. (New) The computer implemented method of claim 67, wherein the media object further comprises a soundtrack associated with the object such that the soundtrack is to be played when the media object is selected by a user, or in response to a movement of the media object.
73. (New) A machine readable storage medium storing executable instructions which cause a processor to perform operations comprising:
receiving a first request to create a three-dimensional virtual reality scene;
receiving a second request to add at least one media object to the virtual reality scene, wherein the media object is two-dimensional;
associating the at least one media object with a series of two-dimensional views of the media object from various orientations and locations in three dimensional space;
preparing a translation vector and a rotation matrix for the media objects, the rotation matrix and the translation matrix defining an orientation and a location of the at least one media object in the virtual reality scene, wherein each two-dimensional view of the at least one media object defines a different orientation of the at least one media object;
building the virtual reality scene for display, wherein the at least one media object is included within the virtual reality scene, and the virtual reality scene is translatable and rotatable, and wherein translating and rotating the virtual reality scene results in changing the respective two-dimensional views of the at least one media object to give the appearance of the at least one media object having three dimensional qualities.
74. (New) The computer implemented method of claim 73 further comprising:

receiving a third request to manipulate the virtual reality scene; and updating the translation vector and rotation matrix for the media object responsive to receiving the third request to manipulate the scene.

75. (New) The machine readable storage medium of claim 74 wherein the third request to manipulate is one of a pan request, a zoom request, and a tilt request.

76. (New) machine readable storage medium of claim 73 further comprising:
receiving a third request to manipulate the media object and updating the translation vector and rotation matrix for the media object responsive to receiving the third request to manipulate the media object.

77. (New) The machine readable storage medium of claim 76 wherein the third request to manipulate is one of a pan request, a zoom request, and a tilt request.

78. (New) The machine readable storage medium of claim 73, wherein the media object further comprises a soundtrack associated with the object such that the soundtrack is to be played when the media object is selected by a user, or in response to a movement of the media object.

79. (New) A system comprising:
means for receiving a first request to create a three-dimensional virtual reality scene;
means for receiving a second request to add at least one media object to the virtual reality scene, wherein the at least one media object is two-dimensional;
means for associating the at least one media object with a series of two-dimensional views of the object from various orientations and locations in three dimensional space;
means for preparing a translation vector and a rotation matrix for the at least one media objects, the rotation matrix and the translation matrix defining an orientation and a location of each of the media objects in the virtual reality scene, wherein each two-dimensional view of each media object defines a different orientation of each media object; and
means for building the virtual reality scene for display, wherein the at least two media objects are included within the virtual reality scene, and the virtual reality scene is translatable

and rotatable, and wherein translating and rotating the virtual reality scene results in changing the respective two-dimensional views of the objects to give the appearance of the media objects having three-dimensional qualities.